

## Piercesare Secchi

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Piercesare Secchi is Professor of Statistics at the Department of Mathematics, Politecnico di Milano, member of MOX, the departmental laboratory in modelling and scientific computing, and faculty member of the Data Analytics and Decision Science doctoral program. He was born in Milano, Italy, in 1962. After the diploma in classical studies from the Liceo-Ginnasio "A. Manzoni" in Milano, in 1988 he received the Laurea cum Laude in Mathematics from the Università di Milano, in 1993 the Doctorate in Methodological Statistics from the Università di Trento and in 1995 the Ph.D. in Statistics from the University of Minnesota. From 1991 to 1997 he has been Assistant Professor in Statistics at the Università di Pavia while from 1998 to 2004 he has been Associate Professor in Probability at the Politecnico di Milano, where he became Full Professor of Statistics in 2005. From 2009 to 2016 he served as Director of the Department of Mathematics of the Politecnico di Milano; from 2011 to 2016 he has been a member of the Academic Senate of Politecnico di Milano and the Rector's delegate for clusters and consortia. His recent research interests focus on statistical methods for object oriented spatial statistics, classification of complex data, functional data analysis, data fusion and integration. He is member of the Società Italiana di Statistica, of the Institute of Mathematical Statistics and of the American Statistical Association. He joined many different important research projects both privately and publicly funded. He coordinated the statistical unit within the Aneurisk Project, financed by Siemens Medical Solutions and Fondazione Politecnico, for the functional data analysis of inner carotid centrelines aiming at the evaluation of aneurysms rupture risk. He directed the research activity sponsored by the Italian Regulatory Authority for Electricity and Gas (AEEG) for the development of statistical models and methods aiming at quality of service evaluation and control in energy distribution. He was, and still is, principal investigator for different blue sky research projects financed by ENI at the Politecnico di Milano. He contributed to the development of Urbanscope, a new macroscope for the analysis of the digital traces generated by urban systems, and is now member of the Trespassing transdisciplinary research group at the Politecnico di Milano. He is among the founders of Moxoff, a spin-off of the Politecnico di Milano; since 2010 Moxoff employs mathematics, statistics, numerical analysis and advanced algorithms and software to develop scientific models for business. From 2011 to 2021 he has been member of the board of MIP, the Business School of the Politecnico di Milano. He has been member of the board of CISE in the years 2013-2018. From 2015 to 2019 he was President of the European Center for Nanomedicine (CEN). In 2017, he was part of the expert team *Casa Italia*, the mission structure of the Italian Government dedicated to prevention and security against natural risks. In the same year he has been appointed coordinator for Polimi and member of the steering committee of the Center for Analysis, Decision and Society (CADS), a joint research center between Politecnico di Milano and the Human Technopole research infrastructure based in MIND, Milano.

### Selected publications in recent years:

Azzone G., Balducci A. e Secchi P. (2020), *Infrastrutture e città: innovazione, coesione sociale e digitalizzazione*, Francesco Brioschi Editore, Milano

A. Menafoglio, P. Secchi (2019), O2S2: A new venue for computational geostatistics, *Applied Computing and Geosciences*, <https://doi.org/10.1016/j.acags.2019.100007>

A. Menafoglio, G. Gaetani, P. Secchi (2018), Random domain decompositions for object-oriented Kriging over complex domains, *Stochastic Environmental Research and Risk Assessment*, 32(12), 3421-3437.

A. Menafoglio, M. Grasso, P. Secchi, B. M. Colosimo (2018), Profile Monitoring of Probability Density Functions via Simplicial Functional PCA with application to Image Data, *Technometrics*, 60(4), 497-510.

P. Secchi (2018), On the role of statistics in the era of big data: A call for a debate, *Statistics and Probability Letters*, 136, 10-14.

Menafoglio, M. Grasso, P. Secchi, B. M. Colosimo (2018), Profile Monitoring of Probability Density Functions via Simplicial Functional PCA with application to Image Data, *Technometrics*, 60(4), 497-510.

A. Konrad, P. Arnqvist, P. Secchi, S. Sjöstedt de Luna, S. Vantini, V. Vitelli (2017), Clustering misaligned dependent curves applied to varved lake sediment for climate reconstruction, *Stochastic Environmental Research and Risk Assessment*, 31(1), 71-85.

A. Menafoglio, P. Secchi (2017), Statistical analysis of complex and spatially dependent data: A review of Object Oriented Spatial Statistics. *European Journal of Operational Research*, 258(2), 401-410.

A. Menafoglio, P. Secchi, A. Guadagnini (2016). A class-kriging predictor for functional compositions with application to particle-size curves in heterogeneous aquifers. *Mathematical Geosciences*, 48(4), 463-485.

A. Menafoglio, P. Secchi, A. Guadagnini (2016), Stochastic simulation of soil particle-size curves in heterogeneous aquifer systems through a Bayes space approach. *Water Resources Research*, 52(8), 5708-5726.

D. Pigoli, A. Menafoglio, P. Secchi (2016). Kriging prediction for manifold valued random fields. *Journal of Multivariate Analysis*, 145, 117-131.

M. Grasso, A. Menafoglio, B. M. Colosimo, P. Secchi (2016), Using curve-registration information for profile monitoring. *Journal of Quality Technology*, 48(2), 99-127.

L. Azzimonti, L. M. Sangalli, P. Secchi, M. Domanin, F. Nobile (2015). Blood flow velocity field estimation via spatial regression with PDE penalization, *Journal of the American Statistical Association*, vol 110, 1057-1071.